

Title (en)

DETECTING ELECTRONIC INTRUDERS VIA UPDATABLE DATA STRUCTURES

Title (de)

ERKENNUNG ELEKTRONISCHER EINDRINGLINGE ÜBER AKTUALISIERBARE DATENSTRUKTUREN

Title (fr)

DÉTECTION D'INTRUS ÉLECTRONIQUES PAR L'INTERMÉDIAIRE DE STRUCTURES DE DONNÉES ACTUALISABLES

Publication

**EP 3571620 A4 20191127 (EN)**

Application

**EP 18741917 A 20180111**

Priority

- US 201715408236 A 20170117
- US 2018013403 W 20180111

Abstract (en)

[origin: US2018204215A1] A data structure provides reliable data allowing a security application to detect potential instances of fraudulent use of a payment account. The data structure can be generated using data elements associated with transactions from new authentication requests in a transaction. Once the data structure is generated, clusters within the data structure can be associated with legitimate authentication requests or potentially fraudulent authentication requests. A baseline cluster can be identified from the data structure and used to determine whether the new incoming authentication requests are legitimate or potentially fraudulent.

IPC 8 full level

**G06F 21/50** (2013.01); **G06F 21/31** (2013.01); **G06F 21/44** (2013.01); **G06Q 20/20** (2012.01); **G06Q 20/40** (2012.01); **G07G 3/00** (2006.01); **H04L 29/06** (2006.01)

CPC (source: EP US)

**G06F 21/316** (2013.01 - EP US); **G06F 21/44** (2013.01 - EP US); **G06Q 20/4016** (2013.01 - EP US); **G06Q 20/405** (2013.01 - EP US); **G07G 3/00** (2013.01 - EP US); **H04L 63/08** (2013.01 - EP US); **H04L 63/1425** (2013.01 - EP US)

Citation (search report)

- [X1] US 7458508 B1 20081202 - SHAO XUHUI [US], et al
- [I] US 2016366164 A1 20161215 - COHEN DAVID [US], et al
- [I] US 2009044279 A1 20090212 - CRAWFORD STUART L [US], et al
- [I] US 2011251951 A1 20111013 - KOLKOWITZ DAN [US], et al
- [I] JON T S QUAAH ET AL: "Real Time Credit Card Fraud Detection using Computational Intelligence", NEURAL NETWORKS, 2007. IJCNN 2007. INTERNATIONAL JOINT CONFERENCE ON, IEEE, PISCATAWAY, NJ, USA, 1 August 2007 (2007-08-01), pages 863 - 868, XP031154707, ISBN: 978-1-4244-1379-9, DOI: 10.1109/IJCNN.2007.4371007
- See references of WO 2018136307A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 2018204215 A1 20180719**; CN 110226165 A 20190910; EP 3571620 A1 20191127; EP 3571620 A4 20191127; WO 2018136307 A1 20180726

DOCDB simple family (application)

**US 201715408236 A 20170117**; CN 201880007168 A 20180111; EP 18741917 A 20180111; US 2018013403 W 20180111